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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,080	06/10/2002	Stephen G. Dale	CROSS1490	7094

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EXAMINER
HAMZA, FARUK

ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 June 2002*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 June 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the application filed on June 10, 2002. Claims 1-22
are now pending.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

3.   Claims 1 and 22 are rejected under 35 U.S.C. 112, second paragraph, as
being indefinite for failing to particularly point out and distinctly claim the subject
matter which applicant regards as the invention.

4.   Regarding claim 1, as being indefinite for failing to particularly point out
who or what is storing, receiving, reading and providing data. Applicant's also
failed to point out these actions are done by internal or external or remote
process.

        All of the dependent claims of claim 1 have the same deficiency.

5.   Regarding claim 22, as being indefinite for failing to particularly point out
who or what is storing, receiving, reading and providing data. Applicant's also
failed to point out these actions are done by internal or external or remote
process.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another
filed in the United States before the invention thereof by the applicant for patent, or on an international
application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section
371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors

Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology

Technical Amendments Act of 2002 do not apply when the reference is a U.S.

patent resulting directly or indirectly from an international application filed before

November 29, 2000. Therefore, the prior art date of the reference is determined .

under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C.

102(e)).

7.   Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by

Mandalia (U.S. Patent Number 6,324,584).

8.   Mandalia has disclosed:

*   <Claim 1>

    A method comprising:

    storing inquiry data corresponding to a target device in a cache memory; (Fig. 5,

    78; Column 2, lines 51-54)

    receiving a request for the inquiry data corresponding to the target device;

    (Column 5, lines 19-23)

    reading the inquiry data from the cache memory; and (Column 2, lines 51-54)

    providing the inquiry data corresponding to the target device in response to the

    request. (Column 2, lines 51-54)

*   <Claim 2>

    The method of claim 1, further comprising collecting the inquiry data

    corresponding to the target device prior to storing the inquiry data

    corresponding to the target device. (Column 3, lines 10-12)

*   <Claim 3>

    The method of claim 2, wherein collecting the inquiry data corresponding

    to the target device comprises detecting the inquiry data corresponding to the

    target device as the inquiry data corresponding to the target device is

    transmitted from the target device to a requesting host device. (Fig. 2; Fig. 3)

● <Claim 4>

The method of claim 2, wherein collecting the inquiry data corresponding to the target device comprises detecting a request for the inquiry data corresponding to the target device as the request is routed from a host to the target device and copying the inquiry data corresponding to the target device which is returned by the target device in response to the request. (Fig. 2; Fig. 3)

● <Claim 5>

The method of claim 1, wherein providing the inquiry data corresponding to the target device in response to the request comprises determining whether the target device is busy, and providing the stored inquiry data corresponding to the target device if the target device is busy and providing inquiry data returned by the target device if the target device is not busy. (Fig. 2; Fig. 3)

● <Claim 6>

The method of claim 5, wherein if the target device is not busy, the inquiry data that is returned by the target device in response to the request is stored in the cache memory in place of previously stored inquiry data. (Column 6, lines 40-42; Fig. 3)

● <Claim 7>

The method of claim 1, wherein the inquiry data from the cache memory

is provided to the target device in response to the request regardless of whether

or not the target device is busy. (Fig. 3)

- <Claim 8>

The method of claim 1, further comprising storing inquiry data

corresponding to each of a plurality of target devices, receiving requests for the

inquiry data corresponding to one or more of the target devices, determining

whether the corresponding target devices are busy and, for each of the target

devices that is busy, returning the corresponding stored inquiry data, and, for each

of the target devices that is not busy, returning the corresponding inquiry data

returned by the target device. (Fig. 2; Fig. 3)

- <Claim 9>

The method of claim 1, further comprising: upon receiving a first request

for inquiry data, forwarding the first request to the target device regardless of

whether or not the target device is busy, storing inquiry data returned in

response to the first request, forwarding inquiry data returned in response to

the first request to a requesting device and, in response to subsequent

requests, reading the inquiry data returned in response to the first request from

the cache memory and providing the inquiry data. returned in response to the

first request in response to the subsequent requests. (Fig. 2; Fig. 3)

- <Claim 10>

    The method of claim 1, further comprising determining whether a received command comprises a request for inquiry data and: if the received command comprises a request for inquiry data, reading the inquiry data from the cache memory and providing the inquiry data corresponding to the target device in response to the request; and if the received command does not comprise a request for inquiry data, forwarding the command to the target device for execution. (Fig. 2; Fig. 3)

- <Claim 11>

    A device comprising:

    a router configured to route data between one or more hosts and one or more target devices; and (Fig. 1)

    a memory coupled to the router; (Fig. 5, 78)

    wherein the router is configured to store inquiry data received from the one or more target devices and to provide at least a portion of the stored inquiry data in response to a request for inquiry data corresponding to one of the target devices that is busy. (Fig. 2; Fig. 3)

- <Claim 12>

The device of claim 11, wherein the router is configured to detect the inquiry data as the inquiry data is transmitted from the target device to a requesting host device. (Fig. 3)

- <Claim 13>

The device of claim 11, wherein the router is configured to detect a request for the inquiry data as the request is routed from a host to the target device and copying the inquiry data which is returned by the target device in response to the request. (Fig. 2; Fig. 3)

- <Claim 14>

The device of claim 11, wherein the router is configured to determining whether the target device is busy, and provide the stored inquiry data if the target device is busy and providing inquiry data returned by the target device if the target device is not busy. (Fig. 2; Fig. 3)

- <Claim 15>

The device of claim 14, wherein, if the target device is not busy, the router is configured to store the inquiry data returned by the target device in response to the request in the cache memory in place of previously stored inquiry data. (Column 6, lines 40-42; Fig. 3)

- <Claim 16>

    The device of claim 11, wherein the router is configured to provide the

inquiry data from the cache memory to the target device in response to the

request regardless of whether or not the target device is busy. (Fig. 3)

- <Claim 17>

    The device of claim 11, wherein the router is configured to store inquiry

data corresponding to each of a plurality of target devices, to receive requests for

the inquiry data corresponding to one or more of the target devices, to determine

whether the corresponding target devices are busy and to return the

corresponding stored inquiry data for each of the target devices that is busy,

and returning the corresponding inquiry data returned by the target device for

each of the target devices that is not busy. (Fig. 2; Fig. 3)

- <Claim 18>

    The device of claim 11, wherein if the inquiry data is not stored in the

cache, the router is configured to: upon receiving a first request for inquiry data,

forward the first request to the target device regardless of whether or not the

target device is busy; store inquiry data returned in response to the first

request; forward inquiry data returned in response to the first request to a

requesting device; and, in response to subsequent requests, reading the inquiry

data returned in response to the first request from the cache memory and

providing the inquiry data returned in response to the first request in response to the subsequent requests. (Fig. 2; Fig. 3)

- <Claim 19>

    The device of claim 11, wherein the router is configured to determine whether a received command comprises a request for inquiry data and wherein the router is configured to: if the received command comprises a request for inquiry data, read the inquiry data from the memory and provide the inquiry data corresponding to the target device in response to the request; and if the received command does not comprise a request for inquiry data, forward the command to the target device for execution. (Fig. 2; Fig. 3)

- <Claim 20>

    A storage area network comprising:

    one or more host devices; (Fig. 1)

    one or more sequential access devices; and (Fig. 1)

    circuitry coupled between the one or more host devices and the one or more sequential access devices and coupled to a cache memory; (Fig. 1; Fig. 5)

    wherein the circuitry is configured

    to receive from a first one of the host devices a request for inquiry data corresponding to a targeted one of the sequential access devices, and

    to return inquiry data from the cache memory to the first host device. (Fig. 2; Fig. 3)

- <Claim 21>

    The storage area network of claim 20, wherein the circuitry is configured:

    if the targeted sequential access device is busy, to return inquiry data from the cache memory to the first host device; and (Fig. 3)

    if the targeted sequential access device is not busy, to forward the request to the targeted sequential access device and return inquiry data received from the targeted sequential access device to the first host device. (Fig. 3)

- <Claim 22>

    A computer readable medium, wherein the computer readable medium contains one or more instructions which are configured to cause a computer to perform the method comprising:

    storing inquiry data corresponding to a target device in a cache memory; (Fig. 5, 78;

    Column 2, lines 51-54)

    receiving a request for the inquiry data corresponding to the target device; (Column 5, lines 19-23)

    reading the inquiry data from the cache memory; and (Column 2, lines 51-54)

    providing the inquiry data corresponding to the target device in response to the request. (Column 2, lines 51-54).

Conclusion

9.   The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

- Cousins (U.S. Patent Number 6,587,434) disclosed an intelligent router and method of improving the routing of datagram.

- Dally et al. (U.S. Patent Number 6,654,381) disclosed method and apparatus for event-driven routing.

- Sarkar (U.S. Patent Number 6,247,062) disclosed method and apparatus for routing responses for protocol with no station address to multiple hosts.

- Aviani Jr. et al. (U.S. Patent Number 6,532, 493) disclosed method and apparatus for redirecting network cache traffic.

10.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faruk Hamza whose telephone number is 571-272-7969. The examiner can normally be reached on Monday through Friday.

         If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached at 571-272-3978. The fax

phone number for the organization where this application or proceeding is

assigned is 703-872-9306.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for unpublished applications is available through Private PAIR only. For more

information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 886-217-9197 (toll –free).

Faruk Hamza

Patent Examiner

Group Art Unite 2155

HOSAIN ALAM

SUPERVISORY PATENT EXAMINER